UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,481	02/14/2000	Hirotaka Shiiyama	862.C1823	6661

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EXAMINER
POON, KING Y

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/503,481	SHIIYAMA, HIROTAKA
	Examiner	Art Unit	
	King Y. Poon	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 December 2005</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>See Continuation Sheet</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-17</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>See Continuation Sheet</u> is/are rejected.

7) ☒ Claim(s) <u>38,40,42,44,46,48,102,104,106,108,110 and 112</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>14 February 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-
18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72,74,76,78,80,82,84,86,88,90,92,94,96
,98,100,102,104,106,108,110,112,114 and 115.

Continuation of Disposition of Claims: Claims rejected are
18,20,22,24,26,28,30,32,34,36,50,52,54,56,58,60,62,64,66,68,70,72,74,76,78,80,82,84,86,88,90,92,94,96,98,100,114 and
115.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 18, 20, 82, 84, 14, 115 rejected under 35 U.S.C. 103(a) as being

unpatentable over Wang et al (US 5,805,733) in view of Hoang (US 6,014,183).

Regarding claims 18, 82: Wang teaches an image processing system (fig. 1)

comprising: calculating means (program of fig. 4, column 4, lines 20-25, that calculates

X square) for calculating a degree of similarity (values of X square, column 4, lines 20-

25) from among a plurality of image frames of dynamic image data; determining means

for determining scene-change frames based on the degree of similarity calculated by

said calculating means (column 4, lines 20-25, also see column 4, lines 35-55); and

dynamic image preparation means (program of fig,. 5) for performing automatic editing

and preparation (column 5, lines 45-50) of a digest dynamic image of the dynamic

image data by merging (consolidate, column 5, lines 45-50) a specified duration of

frames (duration of a sense, column 5, lines 55-67, column 5, lines 30-35) having a low

degree of similarity (degree of similarity is selected by user by adjusting threshold,

column 5, lines 60-67) with an immediately preceding frame or some preceding frames

on receipt of instructions to prepare a dynamic digest (the degree of the similarity would

determined dynamic or quiet, column 5, lines 65-67, column 6, lines 1-5).

Wang does not teach the prepared digest dynamic image has a length according to a length according to a length designated by a user.

Hoang, in the same area of merging scenes (column 10,lines 10-20), teaches that before storing, a user is allowed to set a length (time code, column 10, lines 13-15, column 2, lines 1-3) of a scene and the frames are automatically edited and merged such that a digest is created that has a length according to a length designated by a user (the merging and editing is performed after the user modified the time code/length of the scene.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Wang's dynamic image preparation means to include automatically editing and merging frames of the created scene such that a digest is created that has a length according to a length designated by a user.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Wang's dynamic image preparation means by the teaching of Hoang because it would have allowed users to control the system such that the digest created is what a user desired; and it would have prevented a machine from totally take over a person-it is always nice to have a user to be able to control a machine functions according the user's wishes.

Regarding claims 20, 84: Wang teaches an image processing system (fig. 1) comprising: calculating means (program of fig. 4, column 4, lines 20-25, that calculates X square) for calculating a degree of similarity (values of X square, column 4, lines 20-25) from among a plurality of image frames of dynamic image data; determining means

for determining scene-change frames based on the degree of similarity calculated by

said calculating means (column 4, lines 20-25, also see column 4, lines 35-55); and

dynamic image means (program of fig,. 5) for performing automatic editing and

preparation (column 5, lines 45-50) of a digest dynamic image of the dynamic image

data by merging (consolidate, column 5, lines 45-50) a specified duration of frames

(duration of a sense, column 5, lines 55-67, column 5, lines 30-35) having a low degree

of similarity (degree of similarity is selected by user by adjusting threshold, column 5,

lines 60-67) with an immediately preceding frame or some preceding frames on receipt

of instructions to prepare a dynamic digest (the degree of the similarity would

determined dynamic or quiet, column 5, lines 65-67, column 6, lines 1-5).

Wang does not teach the prepared digest dynamic image has a length according

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column 2, lines 1-3) of a scene and the frames are automatically edited and merged

such that a digest is created that has a length according to a length designated by a

user (the merging and editing is performed after the user modified the time code/length

of the scene.

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Wang's dynamic image preparation

means to include automatically editing and merging frames of the created scene such

that a digest is created that has a length according to a length designated by a user.

It would have been obvious to a person with ordinary skill in the art at the time

the invention was made to have modified Wang's dynamic image preparation means by

the teaching of Hoang because it would have allowed users to control the system such

that the digest created is what a user desired; and it would have prevented a machine

from totally take over a person-it is always nice to have a user to be able to control a

machine functions according the user's wishes.

Regarding claims 114, 115: Wang teaches a recording medium recording

program code (117, fig. 1) for the process and system discussed with claims 18, 20.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 22, 24, 26, 28, 30, 32, 34, 36, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70,

72, 74, 76, 78, 80, 86, 88, 90, 92, 94, 96, 98, 100 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Wang et al. as applied to claims 18, 20 above, and further in

view of Hanpachern (US 4,319,286).

Regarding claims 22, 24, 26, 28, 86, 88, 90, 92: Saito does not directly disclose

detection means and processing means for a blank frame scenes/frames.

Hanpachern discloses detection means, which detect a blank scene; in

Hanpachern's system, integrated circuit U1 is used to detect blank frames (col. 4 lines

23-27). Hanpachern also discloses exception-processing means, in which the frame immediately preceding a blank scene is recorded, and the frame immediately following the blank scene is the next frame to be recorded; in Hanpachern's system, integrated circuit U2 and transistor Q9 perform this function (col. 4 lines 50-63).

Wang and Hanpachern are compatible because they are from the same field of endeavor, namely video summary.

Therefore it would have been obvious to one of ordinary skill in the art to add Hanpachern's method of detecting a blank scene, and editing the scene from the digest to Saito and Edgar's system.

The motivation for doing so would have been to eliminate frames with no relevant information from consideration and therefore to speed up processing and decrease the time the user needs to find the information he or she is looking for.

Note: The initial frame and the last frame would have been detected in Wang as scene change frame because the similarity of those frames and other frames of nearby scenes would be large according the 409, fig. 4, Wang. Also see beginning and ending frames of the scenes, column 4, lines 1-5.

Regarding claims 30, 32, 94, 96: Wang teaches wherein when a time duration for each scene-change frame of two scenes in close proximity (nearby, column 5, line 47) is less than the specified duration, frame information from a scene-change frame of the first scene and frame information through a frame from the scene-change frame of the second scene are treated as the result of merging of the scene-change frames of the two scenes into one scene whose duration is equal to the specified duration

(inherently properties: duration of a frame is less than duration of a scene. The specific duration of claims 30-20 is the duration of two scenes being merged into one scene (scene time 519, column 6, lines 14-15, also see column 5, lines 60-65, 10-25, Wang). All individual frames including the scene change frame is less than the specific duration.

Regarding claims 34, 36, 98, 100: Wang teaches wherein when the duration of the scene-change frame of the second scene to be merged falls within a specified duration of the scene-change frame of the first scene, all the frame information of the scene-change frame of the second scene are merged with the scene-change frame of the first scene (inherent properties of consolidate; also see all the frame numbers are merged as related).

Regarding claims 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80: Wang teaches to replay the digest (213, fig. 2). Wang does not teaches to save the digest as a file and to discard the data.

Wang teaches a system to allow users to interact with the image processing system of Wang (column 10-20). Wang also teaches it is well-known in the art to have a user to select and specified a digest created by the user and to discard the digest data (column 1, lines 32-50).

Therefore, it would have been obvious to a person with ordinary skill in the art to have modified the summarizing system of Wang such that a user would decided to save or discard the data created by the computer.

It would have allowed user to change and adjust the digest using a higher or lower threshold (column 5, lines 65-67) to generate a desired (for the user) digest.

Allowable Subject Matter

5.   Claims 38, 40, 42, 44, 46, 48, 102, 104, 106, 108, 110, 112 are objected to as

being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims.

Response to Arguments

6.   Applicant's arguments filed 12/29/2005 have been fully considered but they are

not persuasive.

        With respect to applicant's argument that neither Wang not Hanpachern teaches

an instruction for a digest such that the length of the prepared digest is according to the

designated length, has been considered.

        In reply: Wang does not teach the prepared digest dynamic image has a length

according to a length according to a length designated by a user.

        Hoang, in the same area of merging scenes (column 10,lines 10-20), teaches

that before storing, a user is allowed to set a length (time code, column 10, lines 13-15,

column 2, lines 1-3) of a scene and the frames are automatically edited and merged

such that a digest is created that has a length according to a length designated by a

user (the merging and editing is performed after the user modified the time code/length

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Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Wang's dynamic image preparation

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that a digest is created that has a length according to a length designated by a user.

It would have been obvious to a person with ordinary skill in the art at the time

the invention was made to have modified Wang's dynamic image preparation means by

the teaching of Hoang because it would have allowed users to control the system such

that the digest created is what a user desired; and it would have prevented a machine

from totally take over a person-it is always nice to have a user to be able to control a

machine functions according the user's wishes.

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 19, 2006

KING Y. POON
PRIMARY EXAMINER